

**Amendment of the claims:**

**This listing of claims will replace all prior versions, and listings, of claims in the application.**

**LISTING OF CLAIMS**

1. **(currently amended)** A method for mass spectrometric analysis of a sample containing ~~or suspected of containing~~ a multitude of steroid hormones, comprising the steps:
  - (a) providing a sample containing ~~or suspected of containing~~ a multitude of steroid hormones;
  - (b) deproteinating the sample;
  - (c) separating the multitude of steroid hormones from the sample; and
  - (d) analyzing the multitude of steroid hormones using a mass spectrometer, wherein the multitude of steroid hormones comprises at least four hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphate (DHEAs) and Vitamin D.
2. **(currently amended)** The method according to claim 1 ~~wherein the multitude of steroid hormones are selected from the group consisting of Cortisol, 11-Deoxycortisol, Androstenedione, 17-OH Progesterone, Progesterone, Allopregnanolone, and~~ wherein the at least four steroid hormones are selected from the group consisting of Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulphate (DHEAS), Aldosterone, Testosterone, Estradiol, 16-OH Estrone, 2-OH Estrone, Estrone, Estriol and Vitamin D.

3. **(currently amended)** The method according to claim 1 wherein the sample containing ~~or suspected of containing~~ the multitude of steroid hormones is obtained from a biological sample selected from the group consisting of blood, plasma, serum, urine and saliva.
4. **(original)** The method of claim 3 wherein the biological sample is blood.
5. **(original)** The method of claim 3 wherein the biological sample is plasma.
6. **(original)** The method of claim 3 wherein the biological sample is serum.
7. **(original)** The method of claim 3 wherein the biological sample is urine.
8. **(original)** The method of claim 3 wherein the biological sample is saliva.
9. **(currently amended)** The method according to claim 1 wherein size of said sample containing ~~or suspected of containing~~ the multitude of steroid hormones is at least about 700  $\mu$ L.
10. **(original)** The method according to claim 1 wherein said step of deproteinating the sample comprises:
  - (a) adding acetonitrile, containing internal standards;
  - (b) vortexing the sample; and
  - (c) subjecting the sample to centrifugation.
11. **(original)** The method according to claim 1 wherein said step of deproteinating the sample comprises subjecting the sample to precipitation with an agent containing internal standards, said agent selected from the group consisting of methanol, ethanol and salt.

12. **(previously presented)** The method according to claim 1 wherein said step of separating the multitude of steroid hormones from the sample comprises introducing the sample to a liquid chromatography apparatus comprising a column and subsequently eluting the hormones from the column.
13. **(previously presented)** The method according to claim 12 wherein said step of separating the multitude of steroid hormones from the sample comprises the use of a C-18 column.
14. **(previously presented)** The method according to claim 1 wherein said step of separating the multitude of steroid hormones from the sample comprises the use of a combined liquid chromatography spectrometry apparatus.
15. **(previously presented)** The method according to claim 14 wherein the multitude of steroid hormones are introduced into the mass spectrometer directly after being separated from the sample by way of an on-line extraction and use of a built-in switching valve.
16. **(original)** The method according to claim 1 wherein the mass spectrometer is a liquid chromatography-tandem mass spectrometer.
17. **(original)** The method according to claim 16 wherein the liquid chromatography tandem-mass spectrometer is equipped with an atmospheric pressure photoionization source.
18. **(previously presented)** The method according to claim 1 wherein said step of analyzing the multitude of steroid hormones using a mass spectrometer comprises an ionization technique selected from the group consisting of photoionization, electrospray ionization, atmospheric pressure chemical ionization, and electron capture ionization.
19. **(original)** The method according to claim 18 wherein said ionization technique is photoionization.

20. **(original)** The method according to claim 19 wherein said photoionization technique comprises the use of an atmospheric pressure photoionization source.
21. **(original)** The method according to claim 18 wherein said ionization is performed in positive mode.
22. **(original)** The method according to claim 18 wherein said ionization is performed in negative mode.
23. **(previously presented)** The method according to claim 1 wherein said step of analyzing the multitude of steroid hormones using a mass spectrometer comprises multiple reaction monitoring.
24. **(previously presented)** The method according to claim 1 wherein said step of analyzing the multitude of steroid hormones using a mass spectrometer comprises selected ion monitoring.
25. **(previously presented)** The method according to claim 1 wherein the multitude of steroid hormones are analyzed simultaneously.
26. **(previously presented)** The method according to claim 1 wherein the multitude of steroid hormones are analyzed sequentially.
27. **(currently amended)** A method of instructing an analysis of a sample that contains ~~or is suspected of containing~~ a multitude of steroid hormones, the method comprising providing instructions to prepare the sample according to steps (b) and (c) of claim 1 and analyze the multitude of steroid hormones from the sample according to step (d) of claim 1, wherein the multitude of steroid hormones comprises at least four hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphate (DHEAs) and Vitamin D.

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28. **(currently amended)** A system for the mass spectrometric analysis of a sample containing ~~or suspected of containing~~ a multitude of steroid hormones, comprising:

- (a) reagents for deproteinating the sample, including internal standards;
- (b) reagents for analyzing the multitude of steroid hormones using a mass spectrometer; and
- (c) a mass spectrometer,

wherein the multitude of steroid hormones comprises at least four hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphates (DHEAs) and Vitamin D.

29. **(original)** The system according to claim 28 wherein the mass spectrometer is a liquid chromatography-tandem mass spectrometer.

30. **(currently amended)** A kit for use in mass spectrometric analysis of a sample containing ~~or suspected of containing~~ a multitude of steroid hormones, wherein the multitude of steroid hormones comprises at least four hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphate (DHEAs) and Vitamin D, comprising:

- (a) reagents for deproteinating the sample, including internal standards;
- (b) reagents for separating the multitude of steroid hormones from the sample;
- (c) reagents for analyzing the multitude of steroid hormones using a mass spectrometer;

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- (d) a solution of four steroid hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphate (DHEAs) and Vitamin D; and
  - (e) instructions for analyzing the multitude of steroid hormones using a mass spectrometer.
31. **(original)** The kit according to claim 30 further comprising:
- (a) mobile phase solutions;
  - (b) a chromatography column; and
  - (c) a quality control specimen.
32. **(currently amended)** Use of a mass spectrometer for sequentially or simultaneously analyzing a sample containing ~~or suspected of containing~~ a multitude of steroid hormones, comprising:
- (a) providing a sample containing ~~or suspected of containing~~ a multitude of steroid hormones;
  - (b) deproteinating the sample;
  - (c) separating the multitude of steroid hormones from the sample; and
  - (d) analyzing the multitude of steroid hormones using a mass spectrometer,
- wherein the multitude of steroid hormones comprises at least four hormones selected from the group consisting of estrogens, testosterone, aldosterone, dehydroepiandrosterone, dehydroepiandrosterone sulphate (DHEAs) and Vitamin D.

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33. **(original)** The use according to claim 32 wherein the mass spectrometer is a liquid chromatography-tandem mass spectrometer.
34. **(canceled)**